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| APPLICATION NO. | FILING | G DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-----------|------------|----------------------|---------------------|------------------|
| 10/735,166 | 12/12 | 2/2003 | Akira Fujimoto | 1217-032383 | 1692 |
| 28289 | 7590 | 09/14/2005 | | EXAM | INER |
| THE WEBB | | • | | DOTY, HEAT | THER ANNE |
| 700 KOPPER 436 SEVENT | | - | | ART UNIT | PAPER NUMBER |
| PITTSBURG | H, PA 152 | 19 | | 2813 | |

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | H |
|--|--|---|--------|
| | Application No. | Applicant(s) | : |
| | 10/735,166 | FUJIMOTO, AKIRA | |
| Office Action Summary | Examiner | Art Unit | |
| | Heather A. Doty | 2813 | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the | correspondence address | |
| A SHORTENED STATUTORY PERIOD FOR REPLY | Y IS SET TO EXPIRE 3 MONTH | I(S) OR THIRTY (30) DAYS | |
| WHICHEVER IS LONGER, FROM THE MAILING D/ Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the application to become ABANDON | N. imely filed mthe mailing date of this communication. ED (35 U.S.C. § 133). | • • |
| Status | | | |
| 1)⊠ Responsive to communication(s) filed on <u>07 Ju</u> | ılv 2005 | | |
| | action is non-final. | | |
| 3) Since this application is in condition for allowar | | rosecution as to the merits is | • |
| closed in accordance with the practice under E | | | |
| Disposition of Claims | | | |
| 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application. | | | |
| 4a) Of the above claim(s) <u>1,2 and 5-7</u> is/are with | hdrawn from consideration | | |
| 5) Claim(s) is/are allowed. | | | ; |
| 6)⊠ Claim(s) <u>3 and 4</u> is/are rejected. | | | : |
| 7) Claim(s) is/are objected to | | | • |
| 8) Claim(s) are subject to restriction and/or | r election requirement. | | |
| Application Papers | | | • |
| 9) The specification is objected to by the Examine | r. · | | |
| 10)⊠ The drawing(s) filed on 12 December 2003 is/a | | cted to by the Examiner. | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. So | ee 37 CFR 1.85(a). | |
| Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is o | bjected to. See 37 CFR 1.121(d) |). |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Offic | e Action or form PTO-152. | |
| Priority under 35 U.S.C. § 119 | | | : |
| 12)⊠ Acknowledgment is made of a claim for foreign | priority under 35 H.S.C. & 110/ | a)_(d) or (f) | : |
| a) ⊠ All b) □ Some * c) □ None of: | priority under 35 0.0.0. § 119(| a)-(u) or (i). | • |
| 1. ☐ Certified copies of the priority documents | s have been received. | | |
| 2. Certified copies of the priority documents | | tion No | |
| 3. Copies of the certified copies of the prior | | | |
| application from the International Bureau | u (PCT Rule 17.2(a)). | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | red. | |
| | | | |
| | | | £ |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | 4) 🔲 Interview Summar | ov (PTO 413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail I | Date | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9/6/2005. | 5) Notice of Informal 6) Other: | Patent Application (PTO-152) | |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group II, including claims 3 and 4, in the reply filed on 7/7/2005 is acknowledged.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (U.S. 5,039,576).

Regarding claim 3, Wilson teaches a production method of a film carrier tape for mounting electronic devices thereon, which comprises plating at least a part of a wiring pattern formed on an insulating film with a tin-bismuth alloy (column 2, lines 11-16; column 9, lines 33-34); and washing a portion plated with the tin-bismuth alloy as quickly as possible (column 10, lines 6-16).

Wilson does not expressly teach that the portion is washed within 6 seconds after the plating is completed, but does teach washing the portion as quickly as possible, to avoid staining (column 10, lines 6-16). It has been held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller* 105 USPQ233, 255 (CCPA 1955).

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Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to plate at least part of a wiring pattern formed on an insulating film with a tin-bismuth alloy, and then wash the portion as quickly as possible, to avoid staining, as expressly taught by Wilson, wherein the washing takes place within 6 seconds after the plating is completed.

Regarding claim 4, Wilson teaches the method of claim 3 and further teaches that the plating is conducted by contacting at least a part of the film carrier tape (substrate) with a plating solution for forming a tin-bismuth alloy deposit (column 9, line 62 – column 10, line 5).

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Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather A. Doty, whose telephone number is 571-272-8429. The examiner can normally be reached on M-F, 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr., can be reached at 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID BLUM
PRIMARY EXAMINER